Attorney Docket No.: MIY.004.0003.PC July 20, 2006

IN THE CLAIMS:

Please enter amendments to the claims as follows:

- 1. (Original) An organometallic polymer material characterized as containing an organometallic polymer having an –M-O-M- bond (M indicates a metal atom), a metal alkoxide having a single hydrolyzable group and/or its hydrolysate, and an organic polymer having a urethane bond and a methacryloxy or acryloxy group.
- 2. (Original) The organometallic polymer material as recited in claim 1, characterized as further containing an organic anhydride and/or an organic acid.
- 3. (Currently Amended) The Organometallic polymer material as recited in claim 1 [or 2], characterized in that said organometallic polymer is synthesized by hydrolysis and polycondensation of at least two organometallic compounds having a hydrolyzable group.
- 4. (Original) The organometallic polymer material as recited in claim 3, characterized in that at least one of said organometallic compounds has a functional group capable of crosslinking by exposure to heat and/or an energetic radiation.
- 5. (Currently Amended) The organometallic polymer material as recited in any one of claim[s] 1 [- 4], characterized in that said organic polymer contains a polybutadiene structure and an aryl group in its skeleton.
- 6. (Currently Amended) The organometallic polymer material as recited in any one of claim[s] 1 [– 5], characterized in that a difference in refractive index between a cured product of said organometallic polymer and a cured product of said organic polymer does not exceed 0.01.

Attorney Docket No.: MIY.004.0003.PC July 20, 2006

7. (Currently Amended) The organometallic polymer material as recited in any one of claim[s] 1 [- 6], characterized in that said metal atom M in the organometallic polymer is Si.

- 8. (Currently Amended) The organometallic polymer material as recited in any ene of claim[s] 1 [– 7], characterized in that a metal in the metal alkoxide is Si.
- 9. (Currently Amended) The organometallic polymer material as recited in any one of claim[s] 1 [– 8], characterized in that [it] the material shows an absorption peak around 850 cm⁻¹, due to said metal alkoxide, in the infrared absorption spectroscopic (IR) analysis.
- 10. (Currently Amended) The organometallic polymer material as recited in any ene of claim[s] 1 [– 9], characterized in that [it] the material contains fine particles composed of at least one of a metal, metal oxide and metal nitride and having a particle size of not exceeding 100 nm.
- 11. (Currently Amended) An optical part characterized as having a light transmissive region formed of the organometallic polymer material as recited in any one of claim[s] 1 [– 10].
- 12. (Original) The optical part as recited in claim 11, characterized in that said light transmissive region is formed on a translucent base material.
- 13. (Original) The optical part as recited in claim 12, characterized in that said base material is a high-refractive glass or high-refractive ceramic.
- 14. (Currently Amended) The optical part as recited in any one of claim[s] 11 [-13], characterized in that it is a composite aspherical lens.

Attorney Docket No.: MIY.004.0003.PC July 20, 2006

15. (Currently Amended) A camera module characterized as including the optical part as recited in any one of claim[s] 11 [– 14].

- 16. (Currently Amended) A projector characterized as including the optical part as recited in any one of claim[s] 11 [– 14].
- 17. (Currently Amended) An optical waveguide characterized as including a core and/or cladding layer formed of the organometallic polymer material as recited in any one of claim[s] 1 [– 10].
- 18. (Original) A method for production of the organometallic polymer material as recited in claim 3, characterized as comprising the steps of:

allowing said organometallic compounds to undergo hydrolysis and polycondensation in an organic solvent to synthesize an organometallic polymer;

subsequent to removal of said organic solvent, adding said organic anhydride and/or organic acid;

subsequent to removal of an excess portion of said organic anhydride and/or organic acid, adding said metal alkoxide and/or its hydrolysate; and

subsequent to removal of an excess portion of said metal alkoxide or its hydrolysate, adding said organic polymer.

19. (Original) The method for production of the organometallic polymer material as recited in claim 18, characterized as further comprising the step of performing rinsing to remove hydrophilic components, subsequent to removal of said excess portion of the metal alkoxide and/or its hydrolysate but prior to addition of said organic polymer.